

SUPPLEMENT TO "NATURE."

THE MILLAIS BRITISH MAMMALS.

The Mammals of Great Britain and Ireland. By J. G. Millais. Vol. ii. Pp. xi+299; illustrated. (London: Longmans, Green and Co., 1905.) Price 6l. 6s. net.

IN our notice of the first volume of this sumptuous work we bore testimony to its preeminent excellence and superiority over all other works on the same subject in two most important particulars. First, in regard to the illustrations, both coloured and in black and white, and, secondly, in respect to the full details given of the habits and local distribution of the different species. In these respects we are fully able to endorse and emphasise the praise bestowed on the first volume now that we have before us its successor. Of the nineteen coloured plates in the second volume, all but one, which is by Mr. G. E. Lodge, are from the pencil of that incomparable animal artist Mr. Archibald Thorburn, and when this is said there is practically nothing to add, except to mention that they are the best of their kind. Our only regrets in connection with these admirable works of art are, firstly, that we are unable to reproduce one or two of them for the benefit of our readers, and, secondly, that they have been lithographed and printed in Berlin.

In a work on British mammals it does indeed seem a pity that the illustrations could not have been executed in London, and if their relegation to foreign workmanship has been rendered imperative by financial considerations, all we can say is the more the pity from the point of view of British trade and enterprise.

As regards the illustrations in black and white, all save one are by Mr. Millais himself, and we venture to think that their originality and truthfulness to nature will, if possible, enhance the already high reputation of a great artist. The one plate not by the hand of Mr. Millais is an exquisite picture of an otter and herons by the late Mr. J. Wolf.

There is one other point in which the author deserves special commendation and praise. Mr. Millais has not been content to follow blindly in the track of his predecessors and to take it for granted that when he commenced his work the list of British mammals was complete. On the contrary, he has investigated the animals in their haunts—even in the most remote parts of the United Kingdom—with the result that he has been fortunate enough to add an entirely new and most interesting form of field-mouse, or "vole," to the British list, and likewise an apparently hitherto undescribed form of black rat.

Here it may be mentioned that the present volume includes the descriptions of the British rodents and of the musteline section of the Carnivora.

Having said thus much in commendation of the volume before us, it must be added that in a work of

such pretensions, published at a price which places it only within reach of the comparatively affluent, the public expects something more than superlative excellence in the matter of illustrations and full details as regards the habits and distribution of the animals described. It expects—and rightly expects—accuracy and consistency in regard to matters of nomenclature and other scientific details, and likewise freedom from grammatical errors and faults of style in the text. If we ask ourselves candidly and fairly whether the author has fully realised these expectations, we are afraid that the answer must be in the negative, and we fear that in our notice of the first volume we were a little hasty in stating that the work would form one of the standard authorities on the subject of which it treats; but on these points we must leave our readers to form their own conclusions from the criticisms which follow.

As regards the minor matter of defects in the author's style, we may cite a passage on p. 139, where it is stated that "White weasels are not very rare. . . . They seem to be prone to albinism." Other somewhat similar examples might be cited, but we pass them by to refer to the inelegance of commencing (pp. 133 and 134) five paragraphs, which with one exception are consecutive, with the word "weasels." As an example of another, and much more serious, type of error, we may refer to the very first page of the text, where we find it stated that "The Otters, with the exception of the Sea-Otter (*Latax*) which has flipper-like hind feet analogous but not homologous to those of the seals, have short and rounded feet." Here it was surely quite unnecessary to drag in the subject of analogy and homology—terms which the majority of readers Mr. Millais is likely to attract will probably not understand at all; but, apart from this, the statement is utterly wrong and misleading, and implies that the hind-limbs of the sea-otter represent a structure not found in seals!

Another matter for regret is that in certain instances the scientific names on the coloured plates do not accord with those given in the text as the proper titles for the various species. For instance, on plate xxii. we have the polecat described as *Mustela putorius*, and in the text as *Putorius putorius*; on plate xxiii. we have the stoat figuring as *Mustela erminea*, and in the text as *Putorius ermineus*; while on plate xxiv. the weasel is named *Mustela vulgaris*, whereas in the text it is called *Putorius nivalis*. Whether such confusing inconsistencies are due to the plates having been "made in Germany" is no concern of ours or of the reader, but in a work published at the price asked for Mr. Millais's volume they should not have been allowed to appear, even if it involved reprinting or re-lithographing the plates.

But this comprises only a small portion of the sins of the author in the matter of nomenclature. Apparently Mr. Millais has endeavoured in most cases to follow—whether well advised in this respect or not we need not pause to inquire—the more advanced authorities on this subject, with the result that he has fallen

into some terrible traps. For instance, we are informed on p. 238 that he concluded to retain for the bank-vole the name *Evotomys glareolus* in place of *E. hercynicus britannicus*. Well and good! But why do we find the Skomer vole, which is regarded as a subspecies of the former, designated *E. hercynicus skomerensis*? This, however, is not all, for the latter, which was named by Captain Barrett-Hamilton in 1903, figures as "*sub-spec. nov.*!" apparently on the notion that if an animal is relegated from specific to subspecific rank it is to appear as a new form! The truth, we are afraid, is that the author does not understand even the rudiments of nomenclatural rules.

Another blunder occurs in the case of the so-called water-vole. On p. 231 we are told that the British voles are divisible into the two genera *Evotomys* and *Microtus*, the latter being represented by three species. When, however, we come to p. 287 we find the water-vole described as *Arvicola amphibius*, the author apparently not understanding that, as the representative of a subgenus, it should have been called *Microtus (Arvicola) amphibius*, if he declines to accept the alternative specific title *terrestris* used by advanced writers. In consequence of this blunder the uninitiated reader may enter a kind of puzzle-competition to discover the third species of *Microtus* referred to on p. 231.

Here we may make a short digression to express the wish that the author had given his opinion on the use of the term "Vole." The proper English name of *Microtus amphibius* is undoubtedly "water-rat," just as "hedge-sparrow" is the indefeasible title of the bird ornithologists are pleased to miscall "hedge-accentor." In order to distinguish the water-rat and the short-tailed field-mice from the true rats and mice they have, however, for many years been termed "voles" by naturalists. Now Macgillivray tells us ("Brit. Mammals," Naturalists' Library, p. 260) that the name "vole" is a meaningless term introduced by Dr. Fleming to replace the French *campagnol*, then in use among naturalists. If this be true, the word ought to be expunged from nomenclature altogether as a "bogus" term; and from no point of view is its use justifiable for the British water-rat and short-tailed field-mice, which have vernacular names of their own. It may be added that the word vole does not appear to be derived from the German *Wühlmaus* (burrowing mouse), *Veltmaus* (field-mouse), or *Waldmaus* (wood-mouse).

To revert to our criticisms on nomenclature, we may conclude by mentioning that we are at a loss to understand why, from the point of view of the advanced side of the subject, the author calls the brown rat *Mus decumanus* in place of *M. norvegicus*; and that in the case of the black rat his English names for the local races are open to strong objection, as, for instance, northern Alexandrine rat in place of the northern or typical black for the type form.

Another point of some importance strikes us on looking through the volume. Among the list of photographic illustrations (which are in addition to

the plates already referred to) we note some very interesting plates of the skulls and dentition of the weasel group, rats, dormice, "voles," &c., reproduced from drawings by Mr. H. Grönvold. Curiously enough, there appears no reference in the text to these beautiful figures, nor is there any index pointing out the details of the enlarged figures of teeth.

This is a great pity, as the figures of molar teeth are of much interest, and exhibit details not shown in any other work with which we are acquainted. How the author could have given so much time to the selection and arrangement of such beautiful figures (and from the absence of any reference to the name of any friend who may have assisted the reader is left in the belief that this selection is the work of the author) without describing the structures thus portrayed it is difficult to understand. It may be pointed out that it would have been better had all the teeth selected for illustration been in the same state of wear; and we note some little errors, due to the lack of skilled supervision, in the figures of the molars of the voles; while in the plate forming the frontispiece the skull of the badger is not, as it purports to be, represented anything like the natural size.

While there is much to admire in this volume, the foregoing criticisms (which by no means exhaust all that might be said) show that it is a long way short of perfection. The truth, we venture to think, is that the author, although an enthusiastic and excellent field-naturalist, lacks the scientific training necessary for success in a work of this nature, and, as we have had occasion to remark when reviewing the works of other amateur naturalists, it would have been better had the assistance of one of his professional brethren been secured for the revision of the nomenclature and other technical aspects of the subject. Such a magnificent undertaking ought not to be marred by any feeling on the part of its author that it is beneath his dignity to claim such assistance in regard to details and technicalities with which the amateur field-naturalist can scarcely be expected to be acquainted.

R. L.

THE ORIGIN OF KINGSHIP.

Lectures on the Early History of the Kingship. By Dr. J. G. Frazer. Pp. viii+309. (London: Macmillan and Co., Ltd., 1905.) Price 8s. 6d. net.

WE learn from the preface to this work that it consists substantially of a series of extracts from the forthcoming third edition of the "Golden Bough." Few, however, will feel called upon to quarrel with the author for this somewhat unusual procedure, for the "Golden Bough" is, to use a mixed metaphor, a work of many diverse threads, and the lay reader will be grateful for the chance here given him of following up one line of argument, itself far from simple, without the necessity of disentangling it from a mass of material and hypothesis linked together by the general theory there set forth.

Dr. Frazer warns his readers at the outset that they must not expect him to deal exclusively with